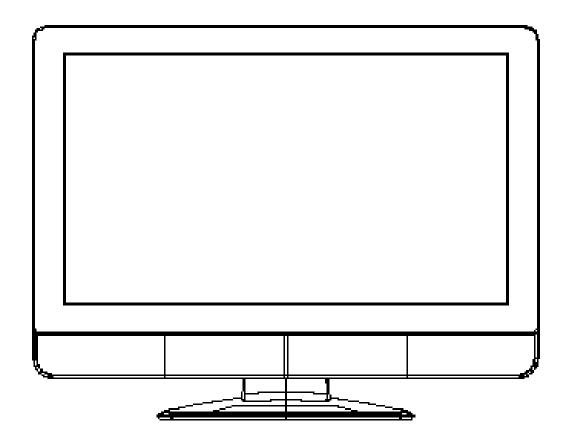
Service Manual



Model: VIZIO VF552XVT_LC550WUL-SBM2

V, Inc

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Table of Contents

CONTENTS	PAGE
Sections	
1. Features	1-1
2. Specifications	2-1
3. On Screen Display	3-1
4. Factory Preset Timings	4-1
5. Pin Assignment	5-1
6. Main Board I/O Connections	6-1
7. Theory of Circuit Operation	7-1
8. Waveforms	8-1
9. Trouble Shooting	9-1
10. Block Diagram	10-1
11. Spare parts list	11-1
12. Complete Parts List	12-1
Appendix	
1. Main Board Circuit Diagram	
2. Main Board PCB Layout	
3. Assembly Explosion Drawing	
Block Diagram	

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FCC INFORMATION

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause unacceptable interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures -- reorient or relocate the receiving antenna; increase the separation between equipment and receiver; or connect the into an outlet on a circuit different from that to which the receiver is connected.

FCC WARNING

To assure continued FCC compliance, the user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications to Amtrak products will void the user's authority to operate this device. Thus VINC Will not be held responsible for the product and its safety.

CE CERTIFICATION

This device complies with the requirements of the EEC directive 89/336/EEC with regard to "Electromagnetic compatibility."

SAFETY CAUTION

Use a power cable that is properly grounded. Always use the AC cords as follows – USA (UL); Canada (CSA); Germany (VDE); Switzerland (SEV); Britain (BASEC/BS); Japan (Electric Appliance Control Act); or an AC cord that meets the local safety standards.

Chapter 1 Features

- 1. Built in TV channel selector for TV viewing
- 2. Simulatnueous display of PC and TV images
- 3. Connectable to PC's analog RGB port
- 4. Built in S-video, HDTV, composite video, HDMI and TV out
- 5. Built in auto adjust function for automatic adjument of screen display
- 6. High quality 1920X1080 pixel by pixel display
- Smoothing function enables display of smooth texts and graphics even if image with resolution lower than 1920X1080 is magnified
- 8. Advanced video functions for personal favor
- 9. Picture In Picture (PIP) function to show TV or VCR images
- 10. Power saving to reduce power consumption less than 1W
- On Screen Display user can define display mode
 (i.e. color, brightness, contrast, sharpness, backlight), sound setting, PIP,
 TV channel program, aspect and gamma or reset all setting.

Chapter 2 Specification

1. TFT-LCD CHARACTERISTICS

Model Name: LC550WUL-SBM2

Display Size: 54.64 inches (1387.80mm) diagonal

Outline Dimension: 1286.0mm (H) x 745.0mm (V) x 65.0mm (D)

Pixel Pitch: 0.630mm x 0.630mm x RGB

Pixel Format: 1920 horiz. By 1080 vert. Pixels RGB strip arrangement

Display Mode: Transmissive mode, Normally black

Surface Treatment: Hard Coating (3H), Anti-glare treatment of the front

polarizer (Haze 10%)

2. TFT-LCD OPTICAL CHARACTERISTICS

Contrast ratio: 1400(Typ) _ LC550WUL-SBM2 Surface Luminance, White: 500 cd/m2 (Typ)

Luminance Variation, δ =1.3 (Max) Response Time =8ms (Max=12ms)

Viewing Angle (CR>10)

Left: 89° (min). Right: 89° (min). Top: 89° (min). Bottom: 89° (min).

3. Input Connectors

1x Co-axial RF (ATSC/QAM/NTSC)

5x HDMI™** with HDCP (1 with Stereo Audio RCA)

1x Component YPbPr plus Stereo Audio

1x RGB PC plus Stereo Audio

1x S-Video plus Stereo Audio (shared with AV1)

1x Composite Video plus Stereo Audio (AV1 & AV2)

USB X3 FW Update

Ethernet

4. POWER SUPPLY

Input Voltage Level: 100~240Vac, 50/ 60 Hz

Power Consumption: 316W MAX Power OFF: to less than 1W MAX

File No. SG-0321

5. SPEAKER

Built in Speakers: 2 x 15 W

6. ENVIRONMENT

Operating Temperature: 5c~35c (Ambient)

Operating Humidity:10%~70%RH(Non-condensing)

Operating Altitude: 0 -14,000 ft Non-Operating: 0-40,000ft

7. DIMENSIONS (Physical dimension)

Dimensions with stand: 1307.49mm(W) x 860.79mm(H) x 125.75mm(D) Dimension without stand: 1307.49mm(W) x 912.14mm(H) x 342.42mm(D)

8. WEIGHT (Physical weight)

a. Net TBD+/- 1.0 kg (with base)

TBD +/- 1.0kg (without base)

b. Gross TBD +/- 1.0 kg

Precaution

Please pay attention to the followings when you use this TFT LCD module

1. OPERATING PRECAUTIONS

- (1) The spike noise causes the mis-operation of circuits. It should be lower than following voltage:
 - V=±200mV (Over and under shoot voltage)
- (2) Response time depends on the temperature.
 - (In lower temperature, it becomes longer)
- (3) Brightness depends on the temperature.
 - (In lower temperature, it becomes lower)
 - And in lower temperature, response time
 - (Required time that brightness is stable after turned on becomes longer)
- (4) Be careful for condensation at sudden temperature change.
 Condensation makes damage to polarizer or electrical contacted parts.
 And after fading condensation, smear or spot will occur.

- (5) When fixed patterns are displayed for a long time, remnant image is likely to occur.
- (6) Module has high frequency circuits. System manufacturers shall do sufficient suppression to the electromagnetic interference. Grounding and shielding methods may be important to minimize the interference.
- (7) Please do not give any mechanical and/or acoustical impact to LCM. Otherwise, LCM can't be operated its full characteristics perfectly.
- (8) A screw which is fastened up the steels should be a machine screw.
- (9) Please do not set LCD on its edge
- (10) Partial darkness may happen during 3~5minutes when LCM is operated initially in condition that luminance is under 40% at low temperature (under 5°C). This phenomenon which disappears naturally after 3~5 minutes is not a problem about reliability but LCD characteristic.

2. Handing Precaution For Protection

- (1) The protection film is attached to the bezel with a small masking tape. When the protection film is peeled off, static electricity is generated between the film and polarizer. This should be peeled off slowly and carefully by people who are electrically grounded and with well ion-blown equipment or in such a condition, etc.
- (2) When the module with protection film attached is stored for a long time, sometimes there remains a very small amount of glue still on the bezel after the protection film is peeled off.
- (3) You can remove the glue easily. When the glue remains on the bezel surface or its vestige is recognized, please wipe them off with absorbent cotton waste or other soft material like chamois soaked with normal-hexane.

Chapter 3 On Screen Display

Operation:

Main unit button (1) POWER $^{\circlearrowleft}$

(2) MENU

(3) CH +

(4) CH -

(5) VOL+

(6) VOL -

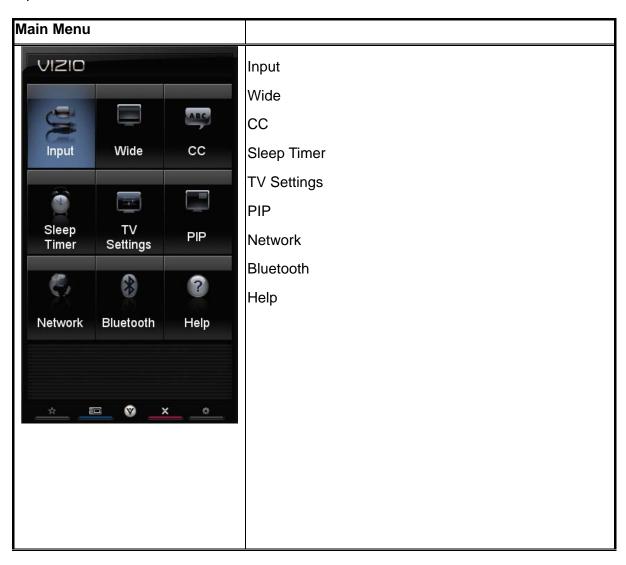
(7) INPUT

OSD Adjustment

Input Source Selection

TV AV Comp HDMI [1 -3] HDMI-Side RGB

Operator menu



Input Source Selection VIZIO Input Source Selection

ΤV

ΑV

Comp

HDMI-1 HDMI-2

HDMI-3 / DVI

HDMI Side

RGB

TV

ΑV

Comp

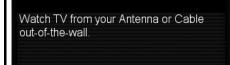
HDMI-1

HDMI-2

HDMI-3 / DVI

HDMI Side

RGB

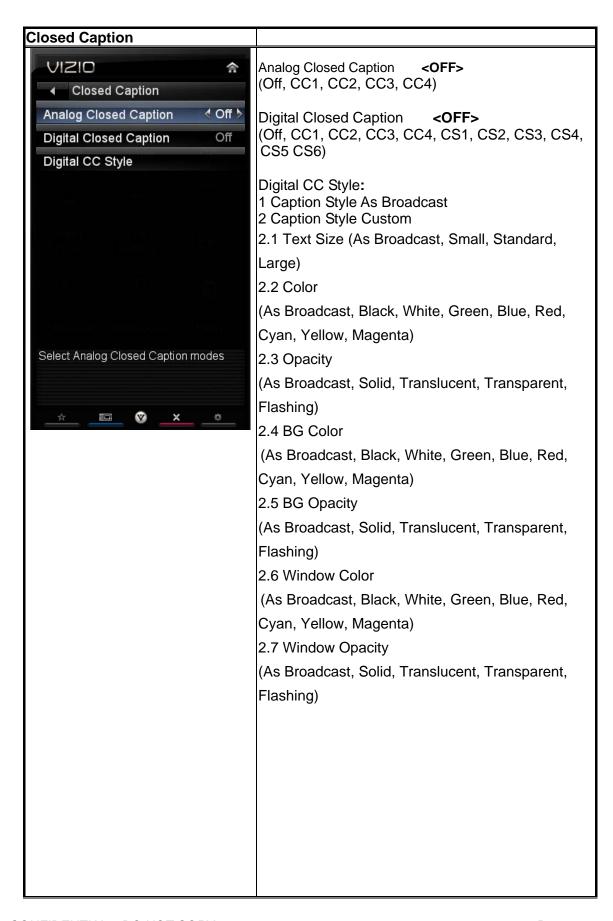


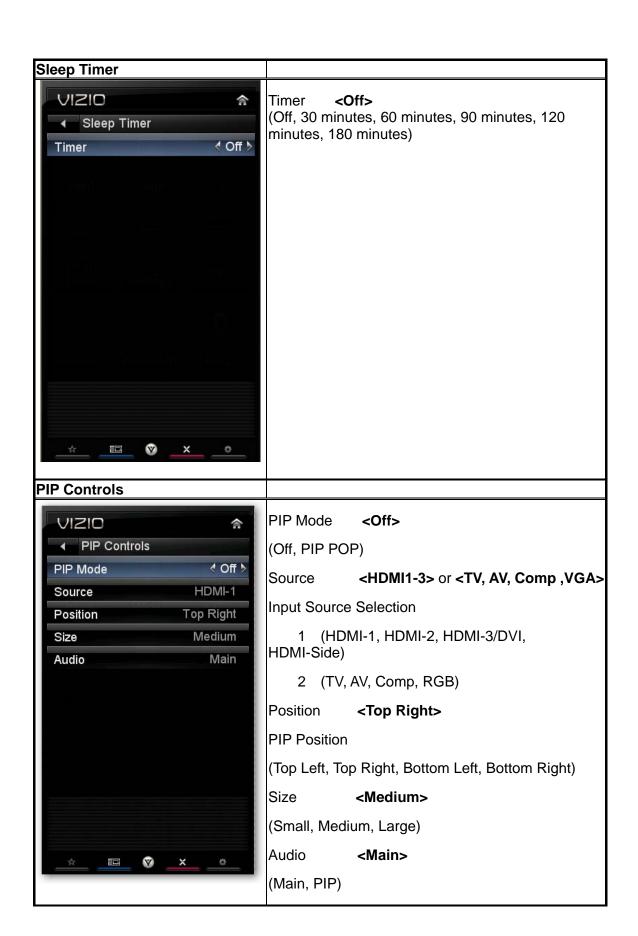
⊘ × ⊕

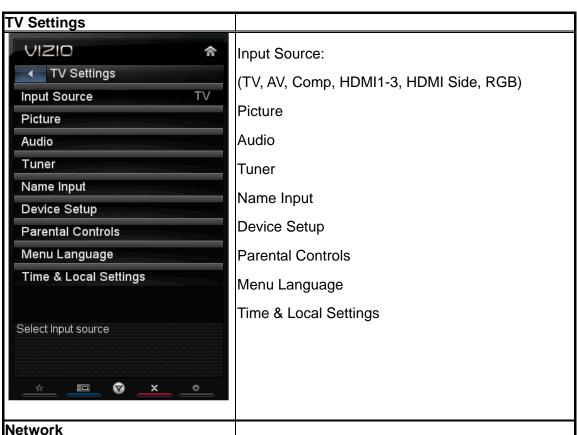
Screen Mode

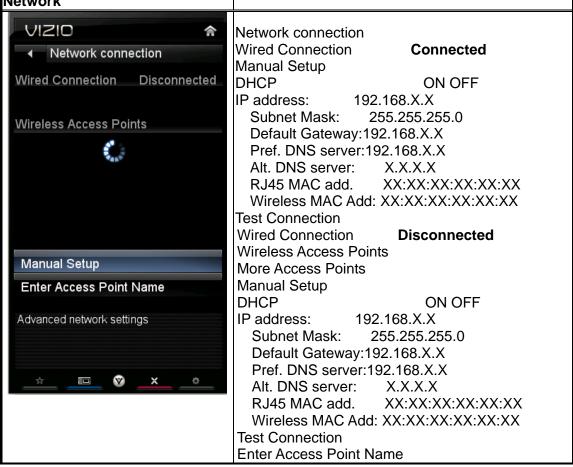


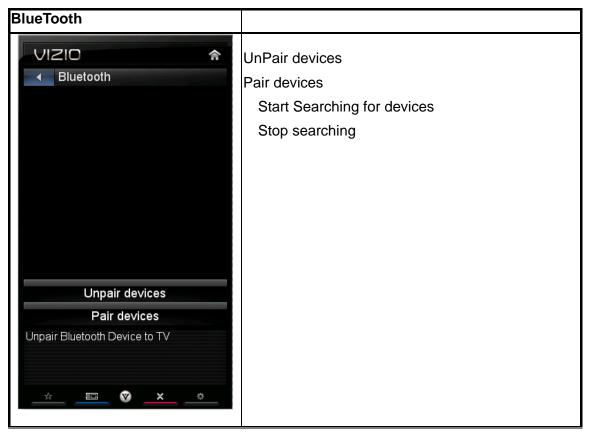
Source	AV/CON	MP/HDMI/ATV	/ DTV		RO	RGB	
Resolution	480i/p	720p,1080i/p	480i/p	720p,1080i/p	4:3	16:9	
Zoom1	Yes	Yes	Yes	Yes	N/A	N/A	
Zoom2	Yes	Yes	Yes	Yes	N/A	N/A	
Full	N/A	Yes	N/A	N/A	Yes	Yes	
Stretch	N/A	Yes	N/A	Yes	N/A	Yes	
Normal	Yes	N/A	Yes	N/A	Yes	N/A	

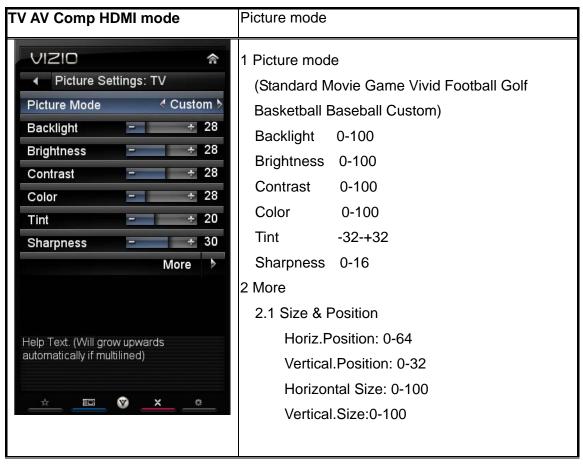


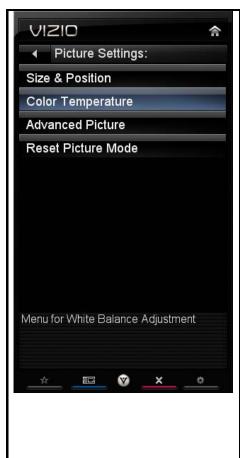












2.2 Color Temperature

Custom, Cool, Computer, Normal

Red Gain 0-255

Green Gain 0-255

Blue Gain 0-255

Red offset 0-255

Green offset 0-255

Blue offset 0-255

Reset Color Temperature

2.3 Advanced Picture Settings

Smooth Motion Effect (off, Low, **Middle**, High)

Real Cinema Mode (off, Smooth, Precision)

Noise Reduction (off, Low, Medium, High)

Color Enhancement (Off, Normal, Rich Color,

Green/Flesh, Green/Blue)

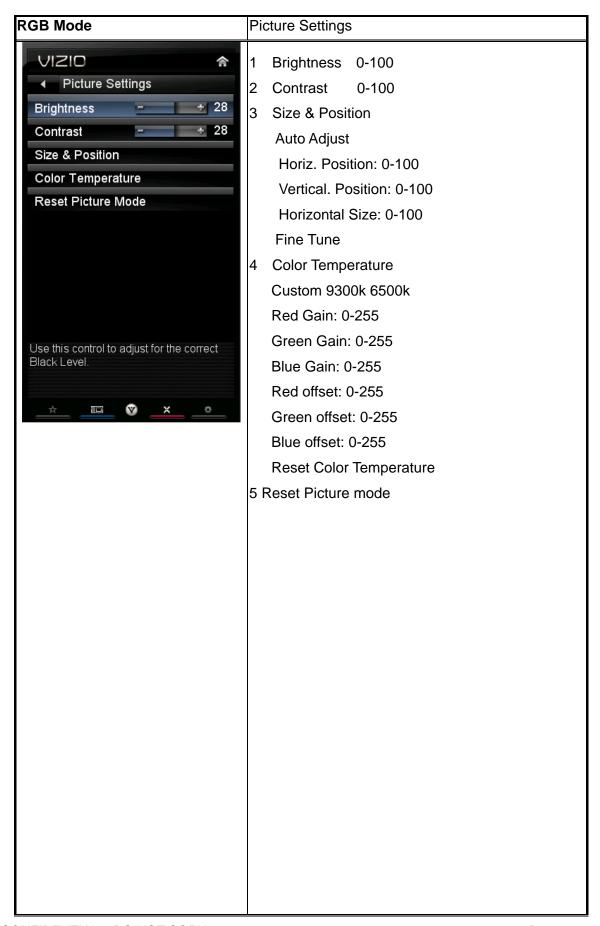
Advanced Adaptive Luma (Off, Low, Medium,

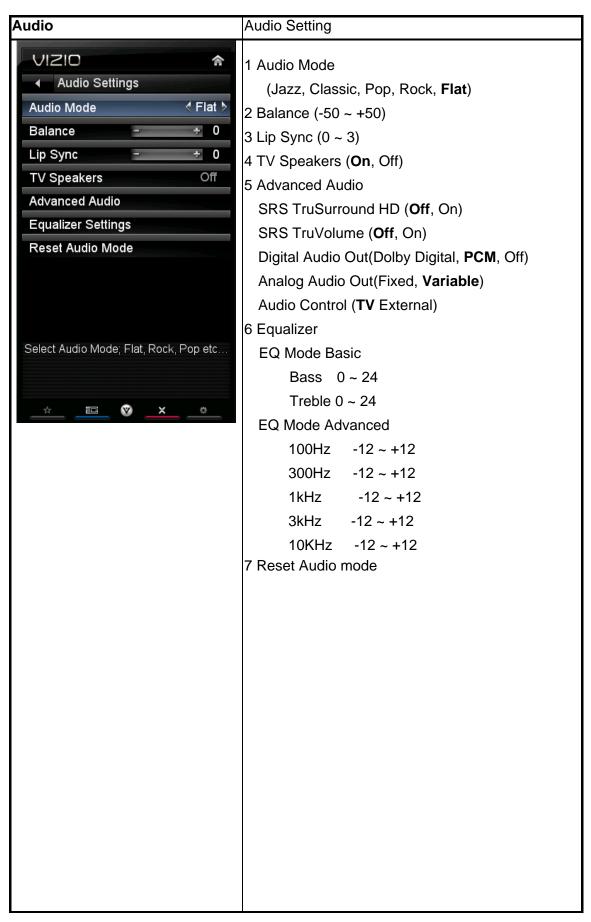
Strong, Extend)

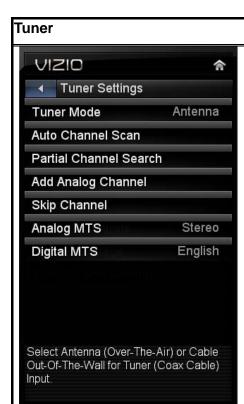
Film Mode (off, Auto)

Smart Dimming(**On**, Off)

2.4 Reset Picture mode







Tuner Settings

- 1 Tuner Mode (Antenna, Cable)
- 2 Auto Channel Scan
- 3 Partial Channel Search
 - 3.1 Scan mode (Analog, Digital)
 - 3.2 From Channel
 - 3.3 To Channel
 - 3.4 Start
- 4 Add Analog Channel (Parental Controls)
 - 4.1 Enter Channel
 - 4.2 Add Channel
- 5 Skip Channel
- 6 Analog MTS (Mono, Stereo, SAP)
- 7 Digital MTS (English, French, Spanish)

Name Input

V

×



Inout Source

TV, AV, Comp, HDMI1-3 HDMI-Side RGB

Input Labels

Antenna, BluRay, Cable, DTV, DVD, Game, Hi Def, PC, Sat, STB

Show Keyboard

Done

Device Setup



- 1 Pick Device Type(VCR,DVD,Sat, PVR,PCVR,HID Devices)
- 2 Pick Device Brand
- 3 Confirm Remote Connection

It Worked

Try the Next Code

Parental controls



Enables Rating (Off, On)

Channel lock

US TV Ratings

TV-Y (AII)

TV-Y7 (AII, FV)

TV-G (All)

TV-PG (All, D, L, S, V)

TV-14 (AII, D, L, S, V)

TV-MA (All, L, S, V)

US Movie Ratings

G

PG

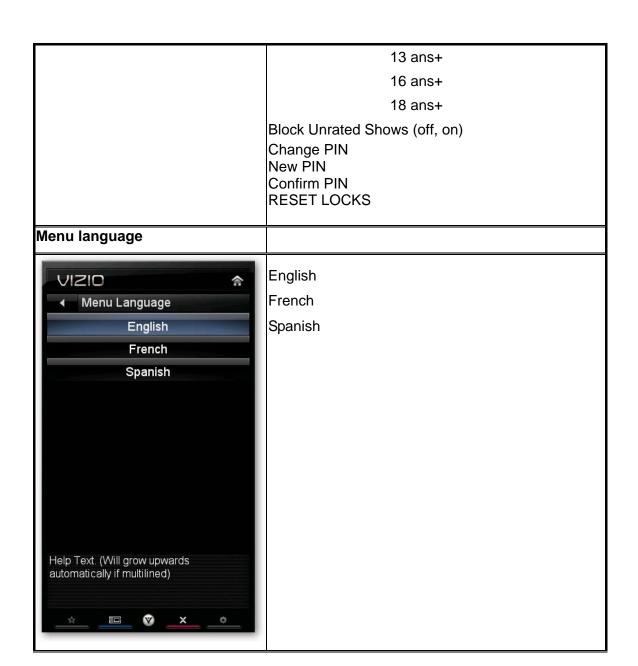
PG-13

R

NC-17

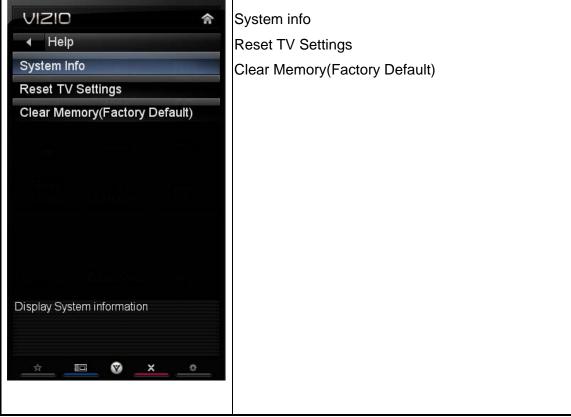
Χ

DTV Ratings	
U.S. (50 States + Possessions)	
EntireAudience	None
	TV-G
	TV-PG
	TV-14
	TV-MA
Dialogue	D
Language	L
Sex	S
Violence	V
Children	TV
Children	Υ
	TV
	Y7
Fantasy	
Violence	FV
MPAA	N/A
	G
	PG
	PG
	13
	R
	NC
	17
	X
	NR
Canadian English Ratings	
	С
	C8+
	G
	PG
	14+
	18+
Canadian French	Ratings
	G
	8 ans+



Time & Local Settings 1Time Zone VIZIO Alaska(US) **◆** Time Not Available Alaska (US) Time Zone Hawaii(US) Daylight Savings Pacific(US,CAN) Postal Code Mountain(US,CAN) Central(US,CAN) Eastern(US,CAN) Atlantic(CAN) Newfoundland(CAN) Indiana(US) Arizona (US) 2 Daylight Saving (On, Off) Set your time zone 3 Postal Code W × Help



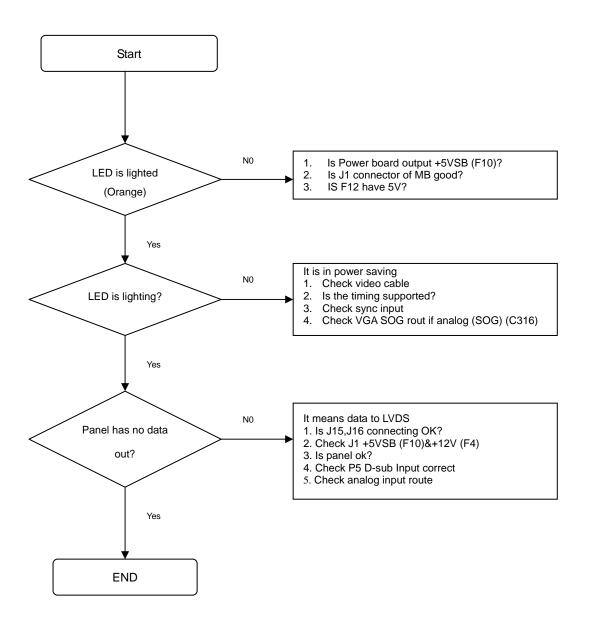


Widget Dock (TBD)

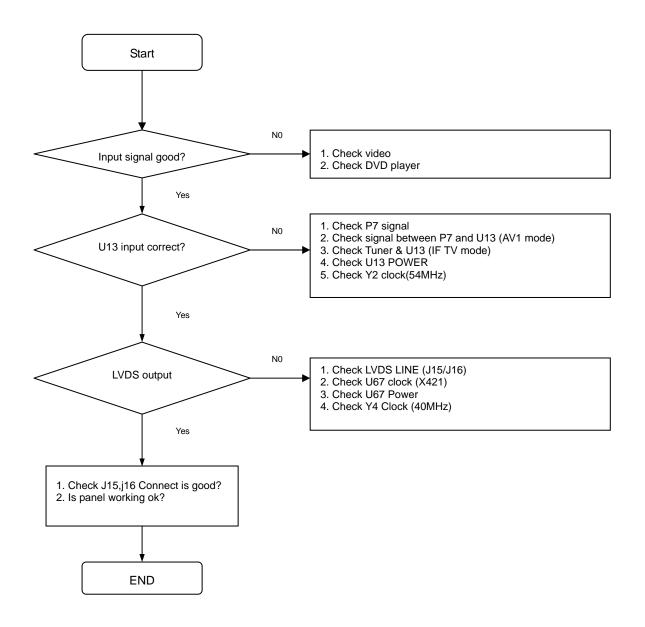
Yahoo Widget	
	Profile
	News
	Finance
	Weather tbd
	Gallery tbd
Widget 3th party	
	Flicker tbd
	Amazon Video tbd
	FunSpot tbd
	NetFlix tbd
	Rhapsody tbd

Chapter 9 Trouble shooting

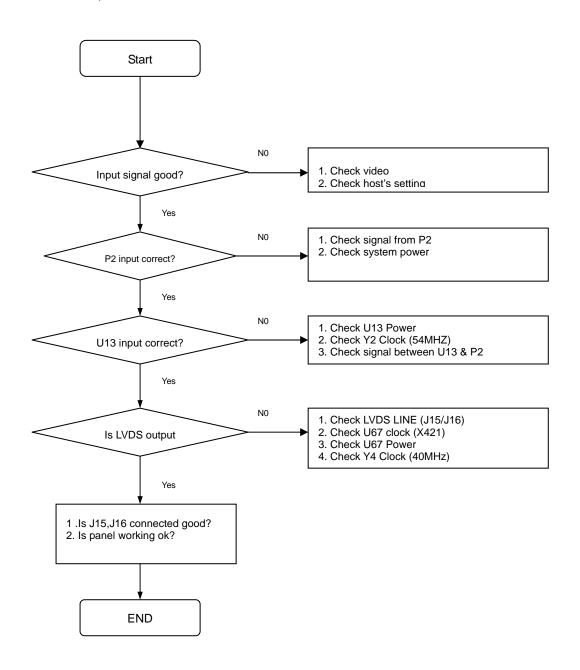
MONITOR DISPLAY NOTHING (PC MODE)



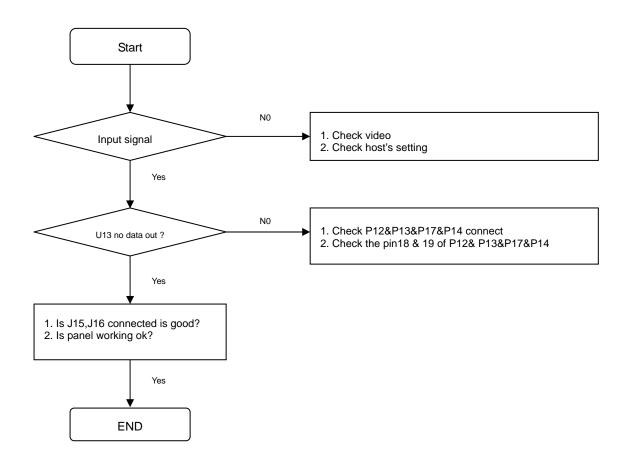
(TV, AV VIDEO1, S-VIDEO) IS NOT DISPLAY CORRECTLY



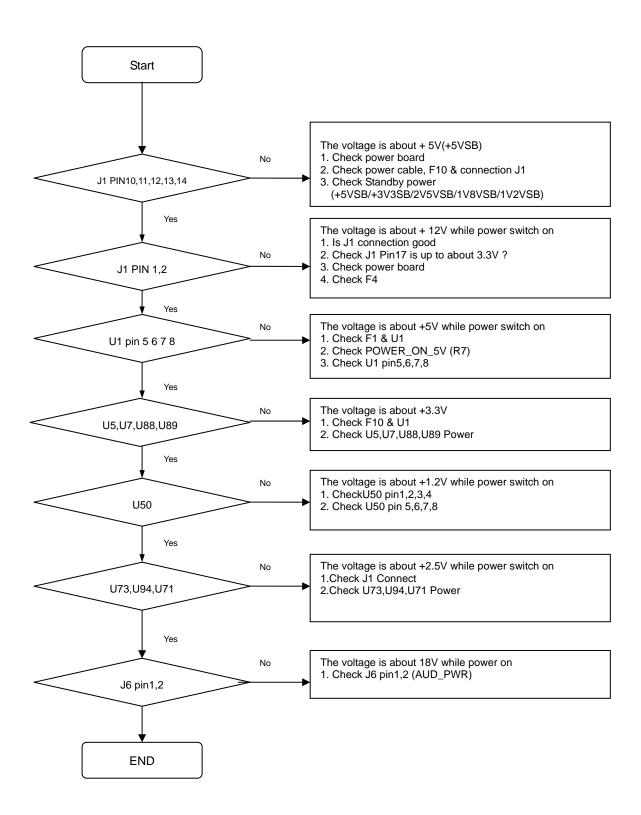
(COMPONENT1) IS NOT DISPLAY CORRECTLY



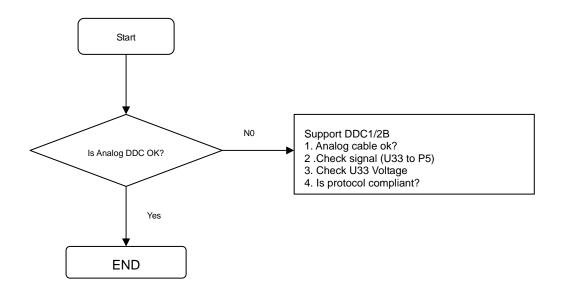
(SIDE JACK BD COMPONENT2 & VEDIO 2) IS NOT DISPLAY CORRECTLY (HDMI1,2,3,side HDMI)IS NOT DISPLAY CORRECTLY



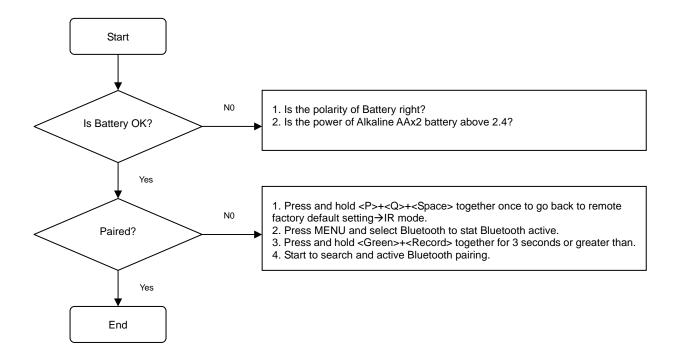
TROUBLE OF DC-DC CONVERTER



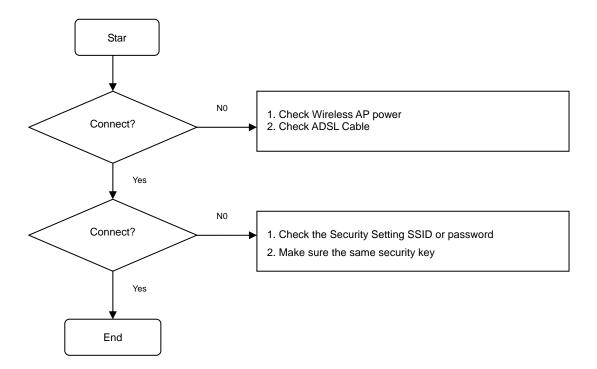
TROUBLE OF EDID READING



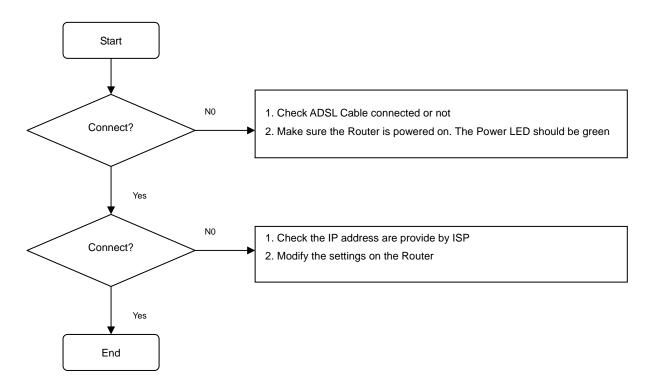
VUR10 IS NOT ACTIVE: BLUETOOTH MODE



WI-FI WIRELESS CAN'T CONNECT TO INTERBET



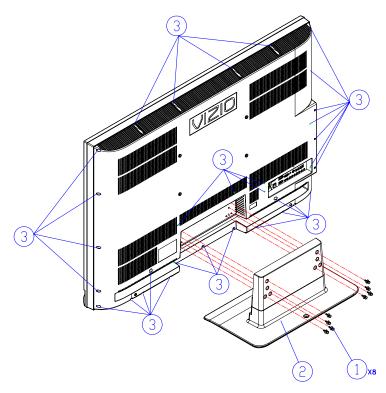
ETHERNET CAN'T CONNECT TO INTERNET

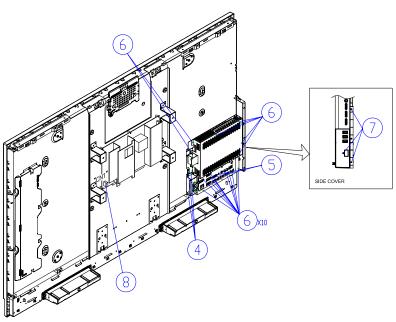


1.REAR COVER ASS'Y REMOVAL

Note:Spread a mat underneath to avoid damaging the TV surface.

- 1) Remove eight screws ① from Base Ass'y ②.
- 2) Separate the Base Ass'y ②.
- 3) Remove thirty-two screws 3.
- 4) Separate the rear cover .
- 5) Remove three screws ④ from AC Holder.
- 6) Remove the connector (a) (CN1) of the AC_inlet cable.
- 7) Separate the AC_inlet cable.
- 8) Remove seventeen screw (6) and two hexagon screws (5) .
- 9) Remove three screws 7 .
- 10) Separate the side cover Ass'y.





2. MAIN BD ASS'Y / POWER BD ASS'YREMOVAL

- 1) Remove the connector (9 (CN2) of the Main cable 1.
- 2) Remove the connector (ii)(CN3) of the Main cable 2.
- 3) Remove the connector ①(CN4)② (CN5) of the Inverter cable.
- 4) Remove six screws (3) from Power BD Ass'y.
- 5) Separate the Power BD Ass'y.
- 6) Remove the connector (4(J1) (5) (J2) of the LVDS cable.

- 9) Remove the connector (9) (J6) of the LED cable.
- 10) Remove the connector @(J7) of the IR cable.
- 11) Remove the connector 22(J8) of the LED BD cable.
- 12) Remove the connector 23(J10) of the Daughter bd cable.
- 13) Remove the connector 4(D01) of the keypad cable
- 14) Remove nine screws 2).
- 15) Separate the Main BD Ass'y.

